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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/733,717

12/11/2003

Donald W. Kendrick

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35301

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05/07/2009

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EXAMINER

NDUBIZU, CHUKA CLEMENT

ART UNIT

PAPER NUMBER

3743

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/733,717	<b>Applicant(s)</b> KENDRICK, DONALD W.	
	<b>Examiner</b> CHUKA C. NDUBIZU	<b>Art Unit</b> 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on through October 3 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 6,7 and 9-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/11/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of group II, claims 1-5, 8 in the reply filed on October 30 2008 is acknowledged.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first and second faces, central aperture and inboard surface must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show upstream rim 260 in fig 13 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The disclosure is not clearly presented especially in para [0043]. First and second faces and central aperture are not described. It is not clear from the disclosure in para [0043] how the cooling fluid that enters at the flange travels all the way to the cooling gas outlet even though this is a very important aspect of the invention. One expects the path of the cooling fluid to be clearly shown in figs 13 and 14. The position of the bolts in figs 13 and 14 is unclear. Although these are sectional drawings, the position of the bolts will help put things in perspective.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 recites "the interior surface providing the flange inboard surface" where the interior surface is the interior surface of the inner wall. However the interior surface 222 of the inner wall 220 cannot be the flange inboard

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surface. For the purposes of examination it is assumed that the interior surface of the outer wall provides the flange inboard surface.

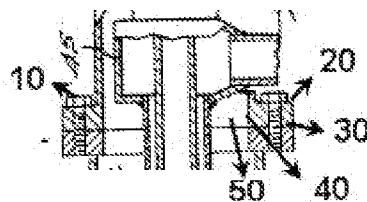
***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Schueler et al 2,904,260. Schueler teaches the invention as claimed (fig 1-4). With regard to claim 1 Schueler discloses an apparatus for directing a gas from an upstream conduit through a vessel wall for cleaning surfaces within the vessel comprising a mounting flange for coupling the apparatus to the upstream conduit delivering the gas and having, (see close-up in drawing below) first 20 and second 30 faces; an inboard surface 40 bounding a central aperture 50; an outboard perimeter (opposite 40); and an array of bolt holes (at 10) between the first and second faces; (see fig 1) a conduit 44 extending downstream from the flange and having; inner (wall of 30) and outer (wall of 44) walls along at least a portion of a length (see fig 1); and a space between the inner and outer walls for carrying a cooling fluid (column 2 lines 65-69, column 3 lines 10-12); a cooling fluid inlet (through pipe 46); and a cooling fluid outlet 38.



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With regard to claim 2 Schueler also discloses wherein the space extends from an upstream end outside the vessel wall at least partially downstream within the wall (see fig 1).

With regard to claim 4 Schueler also discloses wherein the inner and outer walls each have a downstream rim (near 38 fig 2); and the cooling fluid outlet 38 is between the inner and outer walls (fig 2).

Claim element 8 is a means plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. The written description only implicitly or inherently sets forth the corresponding structure, material, or acts that perform the claimed function.

Pursuant to 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181, applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites the corresponding structure, material, or acts that perform the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function.

For the purposes of examination, Examiner assumes that the means for mounting the nozzle are flange and bolt while means for cooling the nozzle is air.

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With regard to claim 8 Schueler also discloses soot blower nozzle comprising; means for mounting the nozzle to an upstream soot blower gas conduit (flange and bolt see fig 1); a surface for guiding gas (interior surface of 33) from the soot blower gas conduit into the interior of the vessel; and means for cooling the nozzle (air, column 2 lines 58-58).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

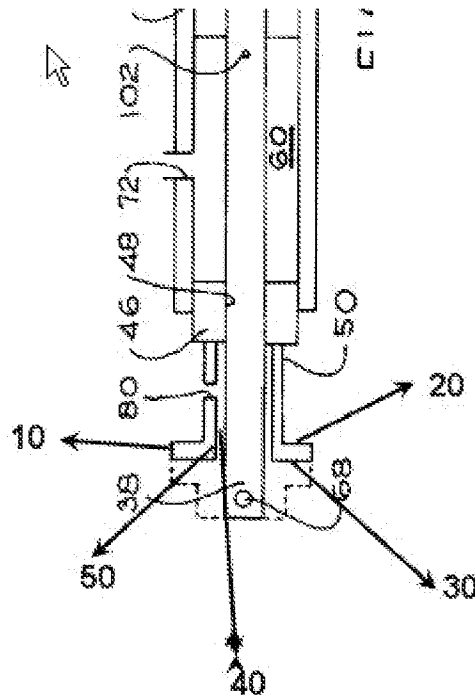
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krowech et al 5,765,510. Krowech teaches the invention as claimed (fig 1-8). With regard to claim 1 Krowech discloses an apparatus for directing a gas from an upstream conduit through a vessel wall for cleaning surfaces within the vessel comprising a mounting flange (fig 1) for coupling the apparatus to the upstream conduit delivering the gas and having, (see close-up in drawing below) first 20 and second 30 faces; an inboard surface 50 bounding a central aperture 40; an outboard perimeter 10; and an array of bolt holes (to take the bolts, column 4 lines 59-60) between the first and second faces; (see the figures) a conduit (fig 2) extending upstream from the flange (38 extends downstream into the vessel) and having; inner (wall of 38) and outer (wall of 46, 50) walls along at least a portion of a length (see fig 2); and a space between the inner and



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outer walls for carrying a cooling fluid (column 7 lines 45-47); a cooling fluid inlet (through 102); and a cooling fluid outlet 68.



With regard to the composite conduit extending downstream from the flange, this is deemed a matter of Engineering design choice. Krowech's composite conduit extends upstream, while conduit 38 extends downstream from the flange during cleaning. Krowech's lance is adequately cooled when extended and when retracted. Having the composite conduit extend downstream of the flange is an obvious variation which is within the purview of one of ordinary skill in the art (see for example Schueler 2,904,260 fig 1).

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With regard to claim 3 Krowech also discloses wherein the cooling fluid outlet is along the conduit (column 7 lines 38-42); and the cooling fluid inlet 80 is along the flange (Gas flow into 80 also cools the conduit 38, column 6 lines 29-35).

With regard to claim 5 Krowech also discloses wherein: the inner wall is essentially formed by a first tubular piece 38 extending from an upstream rim near 44 to a downstream rim after 68 and having interior and exterior surfaces (tube has both surfaces), along an upstream portion, the interior surface of the outer wall (interior surface of 50 fig 2) providing the flange inboard surface.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection. Claims 1-5 and 8 were elected in the restriction and only these claims were examined and rejected in view of new references.

### ***Conclusion***

The prior art made of record in the attached USPTO 892 and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUKA C. NDUBIZU whose telephone number is (571)272-6531. The examiner can normally be reached on Monday - Friday 8.30 - 4.30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Rinehart can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuka C Ndubizu/  
Examiner, Art Unit 3743

20090506

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